

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF INDUSTRIAL ACCIDENTS

**REVIEW CRITERIA**  
**EFFECTIVE OCTOBER 1, 1998**

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**GUIDELINE NUMBER 28 - DIAGNOSIS AND INITIAL TREATMENT OF  
OCCUPATIONAL ASTHMA**

**I. Narrative Description:**

A. Occupational Asthma

**II. History/Symptoms:**

A. Must meet the following:

1. Asthma diagnosed by medical doctor; **and**
2. Historical association between onset of asthma and work  
**OR**
3. A diagnosis of Occupational Asthma; and
4. A history of asthma prior to the occupational exposure in question  
**AND**
5. Documentation of workplace exposure to a category of agents or processes associated with asthma; **or**
  - a. Work-related change in FEV1 or in peak expiratory flow (PEF); or
  - b. Onset of respiratory signs and/or symptoms within hours after an acute, high level, occupational inhalation exposure to an irritant (RADS)

**AND**

**III. Diagnostic Testing Allowed:**

- A. Spirometry Studies, consisting of a minimum of 3 and a maximum of 8 *maneuvers* (max. 11 *studies* allowed); **and**
1. The initial study is performed pre- and post-inhaled bronchodilator (required); **and**
  2. *No more than 2* follow-up studies are allowed to establish a diagnosis of asthma; **and**
  3. *No more than 8* pre- and post-shift studies at the beginning and end of each work week for 2 weeks max. allowed; **and**
  4. Peak Expiratory Flow (PEF) tests taken *by the patient* (required); **and**
    - a. The best of at least 3 maneuver *readings* per test recorded by the patient (required); **and**
    - b. Tests taken at the same time each day, 4 to 5 times per day; **and**
    - c. Taken 7 days per week (max. 4 weeks); **and**
  5. If PEF diary and spirometric monitoring are equivocal, then
    - a. 1 repeat study (max.) allowed at beginning of absence from work; **and**
    - b. 1 repeat study (max.) allowed at end of absence from work; **and**
    - c. PEF diary monitoring repeated

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**B. A Non-Specific Inhalation Challenge Test (one allowed)**

**IF**

1. No significant improvement in FEV1 in response to inhaled bronchodilator; **and**
2. Existence of airways hyper-reactivity remains in question; **and**
3. Test is performed in a hospital-based outpatient setting (required); **and**
4. Performed consistent with Treatment Guideline Number 28 appended algorithm (required);  
**and**
5. Under the supervision of a medical doctor experienced in this procedure (required)

**C. A Specific Inhalation Challenge Test (one allowed) and/or Specific Skin Tests (max. 10 allowed) with relevant antigens**

**IF**

1. Performed by a medical doctor experienced in this procedure (required); **and**
2. Performed in a *hospital-based* outpatient setting (required)

**D. Chest x-rays (max. 1 postero-anterior and 1 lateral view allowed)**

**E. Latex and laboratory animal dander RAST tests (max. 1 allowed per antigen)**

**IV. Treatment Measures Allowed (within scope of license):**

- A. *Documentation in the medical record of discussion with the patient of risk of severe bronchospasm and/or death in the event of re-exposure, where the workplace exposure was to a sensitizing agent;*
- B. *Documentation in the medical record of discussion with the patient of the advisability of elimination or significant reduction of exposure through the use of engineering controls and/or respiratory protection provided by the employer;*

**AND**

- C. *Stepwise approach to pharmacological treatment of asthma according to the Guidelines;*

**AND**

- D. *Documentation in the medical record that the physician has educated the patient with regard to important asthma signs and symptoms, issues around treatment, and monitoring of status.*

**V. Discharge Plan Required:**

- A. *Documentation in the medical record that diagnosis is established and that the patient's asthma is stable with regard to symptoms and lung function prior to discharge from this Guideline.*